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Table 4.

The Inland Water Routes of East China*
(unit: km.-kilometers
mi.-miles)

River	Routes	Distance	Grade

[Face p. 846 (a)]

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Yellow River System			
Chiaolai Canal	Chiaochouwan——Laichouwan	150 km. (94 mi.)	1
Hsiaoch'ing River	Tsinan——Pohai	205 km. (128 mi.)	4
Yellow River	Tsinan——T'ungkuan	790 km. (494 mi.)	4
Hwai River System			
Hwai River	Lienyünkang——Chengyangkuan	600 km. (375 mi.)	4
	Chengyangkuan—Hsinyang	290 km. (181 mi.)	6
Ch'uan-ch'ang River	Funning——T'ienshengkang	250 km. (156 mi.)	6
Hui River	Wuho——Linhuanchi	180 km. (113 mi.)	6
Li River	Hungtse Lake—Ssuhsien	100 km. (63 mi.)	6

[Face p.846 (b)]

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Yangtze River System			
Yangtze River	Shanghai——Hankow	1,100 km. (688 mi.)	1
Yung River	Chenhai——Ningpo—Fenghua	105 km. (66 mi.)	5
Yünho (Canal)	Ningpo——Hangchow	150 km. (94 mi.)	5
Fuch'un River	Hangchow——Ch'angshan	325 km. (203 mi.)	5
Hsinan River	Chiente——Hsiuning	195 km. (122 mi.)	6
Ou River	Yungchia——Lishui	135 km. (84 mi.)	5
Tach'i River	Lishui——Lung h'üan	112 km. (70 mi.)	6
Min River System			
Min River	Minchiangkou—Foochow	56 km. (35 mi.)	1
	Foochow——Nanp'ing	170 km. (106 mi.)	4
Chiench'i (River)	Nanp'ing——P'uch'eng	160 km. (100 mi.)	5
Tungch'i (River)	Chienou——Sungch'i	97 km. (61 mi.)	6
Ch'ungch'i (River)	Chienou——Ch'ungan	137 km. (85 mi.)	6
Shach'i (River)	Nanp'ing——Yungan	160 km. (100 mi.)	5

[Face p. 846 (2)]

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Chiulungch'i (River)	Yungan——————Ninghua	130 km. (81 mi.)	6
Futunchi (River)	Nanp'ing————Kuangtse	200 km. (125 mi.)	5
Chinchi (River)	Shunch'ang——Chianglo	65 km. (41 mi.)	6
Yuch'i (River)	Yuch'ik'ou——Yuch'i	40 km. (25 mi.)	6
Shuang ch'i (River)	Foochow————T'angch'eng	85 km. (53 mi.)	6
Mulanch'i (River)	P'ut'ien————Hsienyu	45 km. (28 mi.)	6
Chin River	Chinchiang——Yungch'un	85 km. (53 mi.)	5
Chiulung River	Amoy——————Lingyen	290 km. (181 mi.)	5
Lung River	Changp'ing——Ningyang	43 km. (27 mi.)	5
	Amoy——————Ts'aoli	65 km. (41 mi.)	6
		Total 6,515 km. (4,072 mi.)	

[(P) 848 p. Face]

*Hsing-ching-yuan Hsin-wen-chü /Bureau of Information, Executive Yuan/, Hang-tao-wang /The Navigation Route Network/ Nanking, 1947, pp. 19-44.

(Table 4 faces p. 846.)

494 Because of the limited supply of gasoline and the minimal domestic production of motor vehicles, the cost of motor transportation is comparatively high in China. But in the coastal regions of East China, where imported fuel is available, the cost may be somewhat lower than in the interior provinces. Large-scale development of motor transportation is still remote. Motor transportation (including short-haul passenger service) is used only in those regions where neither rail nor water transportation are available.

III. INLAND WATER ROUTES

505 Water transporation, especially coastal
487 shipping, plays a very important role in East China. Four of the five provinces have coastlines and important seaports. There are two major navigable rivers, the Yangtze River and the Yellow River; other rivers, including the Hwai and the Min, and many smaller streams are navigable by small steamers and junks. Some of the more important navigable rivers are listed in the following table:

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487 The different "grades" of waterways are determined by the navigability of each river, as explained in the following table:

Table 5. The Grades of Waterways*

Grade	Depth of Water (meters)	Boat Tonnage (gross tons)
1	5-8 (16-24 ft.)	10,000
2	3.8 (12.5 ft.)	2,000
3	3.2 (10.5 ft.)	1,000
4	2.8 (9.2 ft.)	600
5	2.5 (8.2 ft.)	300
6	1.5 (4.9 ft.)	60

* Hang-tao-wang [The Navigation Route Network], Nanking, Hsing-cheng-yüan Hsin-wen-chü [Bureau of Information, Executive Yuan], 1947, pp. 3-5.

The section of the Yangtze River between Shanghai and Hankow and the section between the mouth of the Min River and the city of Foochow are classified as Grade 1 routes and can accomodate steamers up to 10,000 tons.

IV. COASTAL SHIPPING IN EAST CHINA

Shanghai is the center for nearly all the coastal shipping routes. There are about eleven

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Table 6.

The Coastal Shipping Routes of East China*

(unit: km.-kilometers
mi.-miles)

Shipping Line	Routes	Distance
Shanghai--Tientsin	Shanghai--Tsingtao--Tientsin	1,184 km. (740 mi.)
Shanghai--Chefoo	Shanghai--Chefoo	818 km. (511 mi.)
Shanghai--Dairen	Shanghai--Tientsin--Dairen	907 km. (567 mi.)
Shanghai--Yingk'ou	Shanghai--Yingk'ou	1,120 km. (700 mi.)
Amoy--Swatow	Amoy--Swatow	200 km. (125 mi.)
Shanghai--Amoy	Shanghai--Foochow--Amoy	960 km. (600 mi.)
Shanghai--Foochow	Shanghai--Foochow	693 km. (433 mi.)
Shanghai--Ningpo	Shanghai--Ningpo	218 km. (136 mi.)
Wenchow--Foochow	Wenchow--Foochow	240 km. (150 mi.)
Shanghai--Hong Kong	Shanghai--Hong Kong	1,648 km. (780 mi.)
Swatow--Hong Kong	Swatow--Hong Kong	301 km. (188 mi.)
Tsingtao--Hong Kong	Tsingtao--Hong Kong	—
	Total	7,915 km. (4,949 mi.)

*Fei-ch'ü Ti Hung-ch'a Chiao-t'ung /Navigation of Communist China/, Taipei, The Sixth Section, Central Committee, Nationalist Party, Part II, 1953, pp. 2-4.

(Table 6 faces p. 848.)

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505 routes running between East China seaports
487 and ports of other regions.

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Nanking is above the delta proper, and its water connections are limited compared with those of its delta rivals. It has profited primarily from its location at a break in transport routes (including China's major north-south railway, which breaks at the Yangtze—map 8), and from its periodic function as a political capital.

All three cities have been hampered in their modern development by the lack of harbors adequate for ocean ships. At Hangchow an impressive tidal bore and many shoals in Hangchow Bay preclude use of the Chientang estuary by ocean shipping, and the river itself is navigable only for small boats. Soochow, once a maritime trading center, is now effectively land-locked, and was in any case superseded as a port city by Shanghai by at least the eighteenth century A.D. Nanking, 210 miles from the sea, must contend with silting, river currents, and an exposed anchorage. Both Nanking and Hangchow are handicapped as commercial centers, especially in a region where most goods move by water, by the rugged country around them (map 5), which contrasts with the extensive lowland focused on Shanghai. While all three of these cities were larger than Shanghai before the opening of China to foreign trade and to Western commercial exploitation, they were quickly outstripped by Shanghai under the new economic conditions, where access by water to the entire Yangtze basin and to the major ocean lanes of world commerce gave it a decisive advantage.

The city lies topographically at the focus of the east China lowland, converging on it from both the west and the north, and of the Yangtze basin as a whole (map 2). The river and its tributaries, draining the productive heart of China, all feed ultimately to the mouth of the Whangpoo. In the mainly pre-industrial economy of China, the great majority of goods moving beyond purely local markets do so by water. No other location can marshall a fraction of the advantages of Shanghai on this crucial point.

Of China's two other major river systems, the Huang (Yellow) in the north is navigable for steam launches for 25 miles above its mouth and for a small part of its course through Honan, but it is otherwise useless for navigation except in short stretches by small boats. The Hsi (West) River in the south is navigable for some 230 miles in the high-water season (spring and summer) for vessels

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factor in the pre-eminent location of the city. Peking, Tientsin, and Chenghsien are all more important rail centers than Shanghai.

Sea Routes

Shanghai's orientation to the sea is almost equally favorable. It lies less than a hundred miles east of the great circle route followed by shipping between west coast North America, and Japan, China and southeast Asia. All of the major commerce lanes of the western Pacific meet there. Midway on the China coast between north and south, Shanghai has the further double advantage of accessibility from the Chinese hinterland and nearness to Japan and the trans-Pacific trade. The China coast at the Yangtze delta extends farther eastward into the open sea than at any other point. The Yangtze keeps Shanghai in close relation to the hinterland despite its seaward extension, which in turn gives it an advantage over ports south of the coastal bulge, or north China ports on the enclosed Gulf of Pohai.

For the coasting trade it is a natural terminus. A foreign observer noted in 1843[4] that it was the division point between the carrying trade of junks from northern and southern ports, and that it acted as the leading entrepot on the China coast for the concentration and exchange of goods from the two major regions of China. This function Shanghai has retained to the present at least for the coasting trade carried in native junks, which is considerable though largely unmeasured. All direct coastal routes between northern and southern ports must touch the Yangtze estuary.

Shanghai is approximately equidistant in shipping time and distance from western European and eastern United States ports. Shippers must compete there on equal terms, and goods arriving via Suez or Panama can be laid down at competitive prices. Shanghai is not the terminus of either route (Singapore serving this function for west-bound traffic and Nagasaki for east-bound), although it is a major port of call for both. But most important is its focal position for Far Eastern shipping, and its median location between Atlantic Europe and America.

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show an average size of ocean-going ships entering Shanghai harbor between 1850 and 1860 of about 1,000 gross tons. In the decade of the 1860's, this figure reached 2,300, and by 1880 had exceeded 4,000. The original harbor regulations, published by the *North China Herald* in 1852, limited the overall length of ships to 165 feet if they wanted to come as far as Soochow Creek, in view of the narrow channel and confined anchorage. However, between 1850 and 1930 the width of the river at Shanghai decreased from about 2300 feet to 1450 feet, and while dredging had widened somewhat the original channel and anchorage by 1930, the harbor was little more commodious than it had been in 1850.[28] The advent of steam did however make the harbor's overall size and the narrowness of the channel less of a disadvantage than it had been for sailing ships, and it further removed the special advantage of Canton accruing from the monsoon winds.

As early as 1873, representatives of the major foreign shipping firms in Shanghai pointed out to Robert Hart, Inspector General of Customs, the need for dredging the Inner and Outer Woosung bars. Hart approached the Chinese authorities, but could not persuade them to take any action. In the following year, the British chairman of the Shanghai General Chamber of Commerce, in a letter to the British Minister to China, T. F. Wade, asked whether permission might not be obtained for the foreign ratepayers of Shanghai to tax native and foreign shipping in order to dredge the harbor if the Chinese government refused to do anything about it, but Wade also had no success through Peking channels.[29]

As a result of this controversy, Hart in 1875 published his opinion on the problems raised by the vanishing ship-channel, which read in part as follows:

> The trade consequent on opening the Yangtze basin has so far been diverted into a false channel by the vested rights or money spent in Shanghai. The agency is in turn counteracted by the opening of the Suez Canal, through which steamers have begun to pass, making London and Hankow their termini . . . Teas will be shipped at Hankow and Kiukiang, and Shanghai silks and Ningpo teas at Chinkiang. They will be the return cargoes of the steamers which carry what China will continue to demand from Europe. In twenty years' time Chinkiang will

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have taken the place of Shanghai as a semiterminus and transshipment port . . . Thus looked at, as it affects and is affected by natural and artificial agencies now at work at the mouth of the Yangtze, the question of the Woosung Bars is seen to mean that dredging may possibly be nothing more than a means of making the last days of Shanghai a little more comfortable than they would otherwise be; it will not prolong or avert the commercial death of the place, but it will make a show of vitality during its declining years more possible . . . Given the natural and commercial agencies at work, it may be taken for granted that, certainly for ten, or perhaps twenty or thirty years to come, the commercial status and foreign community of Shanghai will be such as to make it worthwhile to prevent the river from being blocked up at any one point, for instance by the Woosung Bars. Dredging can do this, and then only for a time. It cannot secure for Shanghai either a navigable channel or a continuance of commercial prosperity . . . The circumstances of Shanghai, its present position as a commercial centre, the interests of the community and the revenue it yields China, are in themselves sufficient reasons why the demand for dredging ought to be assented to, but it must be borne in mind that no one can say how soon commerce may cease to ask for access to Shanghai, or natural forces acting elsewhere make dredging operations at Woosung useless.[20]

Hart could not of course foresee the degree of improvement in dredging methods and machinery which have kept Shanghai, as well as many other world ports, open to ocean commerce where natural processes would long ago have cut them off or where the dredging equipment of 1875 would have been unequal to the task. He also failed to appreciate that the locational advantages of Shanghai were sufficiently great in relation to other possible centers in the Yangtze basin to make large-scale efforts to combat the disadvantages of its site worthwhile, or to permit its continuance as a major port despite its poor harbor. He may have been influenced in his judgment by the fact that in 1875 the only three trade commodities of importance were opium, tea, and silk. These high unit-value goods were relatively less dependent than bulk or low unit-value goods on precise locational advantages in their transport. As they lost their dominant position in the foreign trade of China, the more diversified and relatively lower unit-value agricultural exports and the equally diversified and low unit-value imports created

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a much greater need for an ocean port with the best possible location. Shanghai's water route connections through the Yangtze system made it the obvious choice.

Hart also did not consider the fact that while the progressive rise in average tonnage of ships in the Pacific trade increasingly emphasized the limitations of Shanghai, it even more pointedly revealed the barriers to navigation on the Yangtze above Shanghai. Chinkiang, Hart's choice as the port most likely to become the major Yangtze basin entrepôt, declined to insignificance in ocean shipping handled by the turn of the century. On the other hand, within twenty years of Hart's prophecy, and while he was still Inspector General of Customs, the gross value of the trade of Shanghai doubled.

As the foreigners continued to see new mud banks rise out of the Yangtze and the Whangpoo, dry out, and be settled and farmed, other gloomy predictions were added to Hart's.[31] Partly as a result of indirect foreign pressure, the Chinese Government purchased a German dredge and began work on the Woosung Outer Bar in 1881, but little was accomplished and work was stopped in 1889. By 1893, the situation led the foreign Commissioner of Customs at Shanghai to remark:

> The Woosung Bar dredging has I think convinced most people that the bar there must always be with us and that business must adapt itself to things as they are . . . The largest vessels which come to port never come any nearer than Woosung. I expect to see development of business there, but the available anchorage is not too capacious, and the distance from go-down is a considerable source of expense.[32]

In addition to the factors mentioned here by the Commissioner, the presence of the Fairy Flats in the Yangtze estuary is probably as much responsible as the progress of dredging in the Whangpoo for the fact that Woosung has never become Shanghai's port in any significant respect.

With the beginning of permanent dredging operations on a large scale by the Whangpoo Conservancy Board in 1905 (see above, Chapter Three), the locational virtues of Shanghai in effect dictated an ultimately successful attack on the city's major site problem.

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share hegemony to a degree with France, but along the Yangtze British preponderance was the logical accompaniment of Britain's trade investment in Shanghai. Without the Yangtze, Shanghai was merely an indifferent harbor.

Two major changes in trade movements resulted from the opening of the river and its tributaries to foreign navigation, aside from the overall increase in foreign trade moving to and from Shanghai. First, the diversion of the export trade of central China (including the Yangtze basin) from Canton to Shanghai, as indicated above in Chapter Four. Under the artificial Canton system, goods for export from central China were obliged to move across the grain of the country in order to reach the only port where foreigners were permitted to trade. The opening of the Yangtze allowed this trade to drain by its natural channels. Two major routes had led from central China to Canton: one from Hankow to the headwaters of the Hsiang River and over the 1400-foot Cheling Pass with a land portage of 26 miles into the headwaters of the Pei River, and one from the lower Yangtze basin via the Kan River to its headwaters near the Meiling Pass at 1000 feet, with a land portage of 24 miles to the headwaters of a tributary of the Pei (map 4). Canton had drawn its trade goods of silk and tea from central China for export via these two routes, but the opening of the Yangtze short-circuited the bulk of this trade to the much closer port of Shanghai.

Goods from central China began in fact, after the effective opening of the Yangtze in 1862, to move to Canton via Shanghai by coastal shipping instead of by the former overland routes. Chungking in Szechuan, which before 1862 had drawn all of its foreign textiles via Canton, was by 1869 entirely dependent on Shanghai for this supply. The delegates of the Shanghai Chamber of Commerce were sufficiently impressed by this indication of the greatly expanded markets which the opening of the Yangtze created for Shanghai that they succumbed to the old dream of British traders of finding buyers for British woolens. Szechuan, they reasoned, had a climate colder than any of the areas where British trade had theretofore reached, and a boom in the woolens trade there could con-

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sequently be expected. Like the earlier grandiose expectations of the East India Company days, it never materialized.*

Second, the opening of the Yangtze was a leading factor in permitting the increasing native opium production, notably in Szechuan, to acquire the major share of the China market by the 1870's, at the expense of opium imported from India. Opium was not introduced into China by the Europeans. It had been consumed domestically, from both domestic and foreign sources, since at least the early eighteenth century, and the first Imperial Edict against the import and smoking of opium was issued in 1729. Small amounts of the Szechuan production had continued to find their way as far as Canton by overland routes well into the nineteenth century, despite new Imperial Edicts of 1821 and later making opium smoking and trading in opium capital offenses. But by 1868, with free navigation on the Yangtze, Szechuan opium undersold Indian opium in Shanghai by about 40 per cent, although its quality was inferior, and it was already beginning to rival the sales of the imported drug.[12] This was true despite the fact that consular records show Shanghai in 1864 accounting for 72 per cent of China's total imports of opium, by virtue of its access to the central China market.[13] By 188-, the Maritime Customs estimated that opium production in China amounted to 224,000 piculs (one picul equals 133 pounds) (of which Szechuan accounted for 177,000 piculs), as against foreign opium imports of only 67,000 piculs.[14]

Though opium was no innovation of the Europeans, it is true that it was they who first organized its import on a large scale. That the trade was avidly taken up by the Chinese is indicated by the rise of Szechuan opium, as well as by the well-known history and complements of the Canton trade.† Foreigners and Chinese alike were eager

* The woolens consumed in north China have continued to come from local industry, both household and factory, which can produce goods of a quality and price better suited to the China market.

† For a discussion of the role of opium in the China trade before 1842, see Greenberg, *British Trade*, especially chapter 5. He includes an analysis of the conditions within and without China which stimulated it, and of the close relationship between the trade in tea and in opium. The revenues of Great Britain and of India, the profits of the British East India Company and of the private trading firms at Canton, and the viability of the tea and silk trade are discussed as they depended in varying, but significant or decisive degree, on the import of opium from India to

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494 505 average per-ton costs over similar distances in the same areas for ordinary goods of about £12 (US$.30 per ton/mile).[15] Tea and silk required special handling, and neither was supposed to get wet or to touch the ground during its transport.* These rates compare with an average of about £14 per ton for tea and silk over similar distances by water transport.[16] Shanghai's water connections were thus a vital advantage in securing for it the lion's share of foreign trade in these two leading commodities. Robert Fortune estimated in 1848 that transport costs for tea from the hinterland to Shanghai averaged about 50 per cent of total costs to that point, while he estimated the figure for Canton at 70 per cent.[17]

651 A desire on the part of the Ch'ing Government to continue the diplomatic and economic advantages resulting from the monopoly system of the Canton Cohong was apparently combined with a desire for increased revenue from the newly expanded trade with the foreigners in a movement to tax tea and silk exported via Shanghai at the same rate as would have been applied if these had moved out via the much longer route to Canton. The resulting Imperial Edict of 1845 ordering the imposition of extra transit dues on this basis had, however, only a nominal effect, since the locational advantages of Shanghai meant that the saving in transport costs and interest charges on tea and silk shipments more than made up for the additional dues.[18]

[245] 505 487 Map 9 shows the major tea-producing areas of China in the nineteenth century. The Yangtze itself runs through the northern part of the area producing the best quality teas, and its tributaries and the Chientang River (with its mouth at Hangchow, from which multiple waterways lead to Shanghai) drain most of the remainder. In spite of its river connections into this area, Wenchow was not a major tea exporter. This was certainly due in part to its relatively late opening to foreign trade, but that fact is in itself related to the high relief in Wenchow's hinterland, through which interrupted navigation provides the only adequate means of trans-

482 * For overland transport, they were carried in special frames mounted on porters' backs, with a supporting stick attached so that the load could be rested without being set down on the ground. For water transport, special care was taken to see that tea and silk were kept in clean dry holds or securely under cover. See Robert Fortune, *A Journey to the Tea Countries* (1852); Richtofen, *Letters to the Committee*.

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505 port. Most of the teas from this area could move out more easily
487 by water to Ningpo, or to Hangchow for transshipment to Shanghai. Foochow and Amoy drew their tea for export primarily from the southern part of the chief producing area, by way of the rivers which terminate at each port, and Canton depended for its tea supply mainly on the route through the Meiling Pass. Ningpo, situated on an indifferently navigable river, in fact drew some of its tea for export from the Chientang basin, via a canal from the Chientang ten miles upstream from Hangchow, but even so three portages were necessary between the river and Ningpo.[19]

245 Shanghai could draw tea from almost all of the chief producing area with much greater facility. Tea in China, as in most of the important tea areas of the world, is a mountain or a hillside crop. It is displaced from the lowlands by grain crops, and it is considered by the Chinese that a more fragrant leaf is produced on slopes and at higher altitudes, where drainage is good, nights are cool, and mists are frequent.[20] In the chief producing area, most of the tea is grown at elevations between 1000 and 2500 feet, and was thus necessarily transported by portage to the local curing and collecting centers. From these local centers, however, the tea moved to larger collection places and to ports of export predominantly by water, especially after the Yangtze was opened to foreign trade.

505 All of the leading tea districts of the area producing the best
439 quality teas (map 9) have through water connections with Shanghai, while only a few of them have similar connections with Foochow, Ningpo, or Wenchow. Amoy and Canton have no through water connections with this area except by sea.[21] Hankow acted as a collecting center for the teas of Szechuan, Hupeh, and Hunan, brought there largely by water and largely transshipped to Shanghai for export, although direct exports of tea from Hankow during the late nineteenth and early twentieth centuries amounted to about one quarter of the amount transshipped to Shanghai for export.[22]

245 The tea of central China is grown in the northern and southern
505 highlands of the hill and mountain ranges south of the Yangtze
487 (called by Cressey the "South Yangtze Hills"), with the better quality teas coming from the northern highlands. The tea leaves are

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picked as a rule three times a year: in April, May, and September, so that the bulk of export shipments comes during the summer high-water period, but occasional picking and regular shipments from the collecting centers continue through most of the winter. The stream pattern is better developed in the northern highlands than in the southern, and it focuses ultimately on Shanghai, either directly via the Yangtze, or via Hangchow. The less well developed stream pattern of the southern highlands drains to at least five separate ports, each in its own isolated river basin.

Along these streams, as along all of the rivers in China, successive trading centers developed at each break in navigation necessitated by rapids or by a change in the depth of the water where junks gave way to sampans or sampans to bamboo rafts. More of these trading centers which acted as collection places for tea are located north of the divide than south of it, and they naturally tended to ship their teas to northern ports for export, although the normal routes were occasionally abandoned in favor of roundabout routes in order to avoid excessive local transit taxes or arbitrary dues, as for example the shipment of tea from the upper Chientang basin overland to Ningpo and thence by sea to Shanghai.[28]

The cargo capacity of the boats, and hence the freight rate from these local centers to larger regional collecting centers, varied sharply with seasonal changes in the water level. In a tea area approximately 150 miles up the Chientang River from Hangchow in 1870, rates for transporting 100 chests of tea to Hangchow varied during the year from Mex$20 in summer to Mex$50 in winter.* During the summer the average time for tea in transit to Hangchow was five days, as against ten days in winter, while goods moving from Hangchow to the area in question took about twenty days at all seasons.[24] The use of water transport in this case is clear from the fact that these rates and transit times follow so closely the conditions of stream navigation, and are the only ones quoted for the tea trade in this area.

W. H. Medhurst in the account referred to above in Chapter Five commented on the fact that tea, at that time marketed entirely by Chinese merchants at the treaty ports, moved to Shanghai from the

* Mex$1 at this period equaled about US$.80

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505 487 producing areas by water, but that many of the routes to Canton began on land and were interspersed with portages. Medhurst also noted that tea was being shipped in large quantities from the northern highlands of the divide to Shanghai, via the smaller tributaries of the Yangtze in Kiangsi and Anhwei.[25] Robert Fortune (see above, Chapter Five) visited the same areas a few years later, also in disguise as a Chinese. His account corroborates in more detail the general impression of Medhurst that tea from nearly all of the collecting centers in the area producing the best quality teas moved to Shanghai by through water routes, while some part of all of the routes to Canton lay on land.* [26]

505 439 By 1867, the British consul at Shanghai, in commenting in his trade report for that year on the greatly increased trade of the port resulting from the opening of the Yangtze, gave his opinion that the greater ease, cheapness, and speed of transport for tea to Shanghai had resulted in a decline in the quality of the tea. He considered that less care was taken with grading and packing the tea for the short haul to Shanghai (where its cost price was of course considerably lower than it had formerly been at Canton), and that it therefore often arrived stale and poorly sorted. This may illustrate in reverse the common association of high unit-value and high-quality goods with high transport costs. He added that before the opening of Shanghai, tea from the northern slopes of the divide frequently spent six months in transit to Canton, but that the average transit from this region to Shanghai after the opening of the Yangtze was approximately six weeks.[27]

However, it was as much the great increase in the volume of the tea trade through Shanghai, in which many more producers were able to enter the export market with the drop in transport costs, which accounted for the decline in quality of the tea. This was no longer a small-scale, specialized, luxury business, but a large commercial enterprise, made possible by uninterrupted water connections. It was clearly these transport advantages of Shanghai as much as its relative nearness to the tea-producing districts which were

* Tea grown along the Hsi-Yangtze divide (the area known as the "Bohea Hills") was necessarily moved to collecting places north or south of the divide by porter.